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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,937	03/22/2001	Keith D. Allen	R-716	1801

7590 01/13/2004

DELTAGEN INC.
1031 BING STREET
SAN CARLOS, CA 94070

EXAMINER

QIAN, CELINE X

ART UNIT	PAPER NUMBER
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1636

27

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/815,937

Applicant(s)

ALLEN ET AL.

Examiner

Celine X Qian

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 59-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 63-69 is/are allowed.
- 6) ☒ Claim(s) 59-62, 70 and 71 is/are rejected.
- 7) ☒ Claim(s) 71 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claims 59-71 are pending in the application.

This Office Action is in response to the Amendment filed on 9/15/03.

Response to Amendment

The rejection of claims under 44-58 under 35 U.S.C. 101/112 1st paragraph is moot in light of Applicant's cancellation of the claims.

The rejection of claims 39-45, 47, 49, 53 and 55-58 under 35 U.S.C. 112 2nd paragraph is moot in light of Applicant's cancellation of the claims.

The rejection of claims 39-43 under 35 U.S.C. 103 (a) is moot in light of Applicant's cancellation of the claims.

The objection to claim 40 is moot in light of Applicant's cancellation of the claims.

Newly added claims 59-62 are rejected under 35 U.S.C. 103 (a) for reasons set forth of the record mailed on 11/5/02 and further discussed below.

Newly added claims 70 and 71 are rejected under 35 U.S.C. 112 2nd paragraph for reasons set forth below.

Newly added claim 71 is objected to for reasons set forth below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 59-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mansour et al (1988, Nature, vol. 336, No. 24, 348-352), in view of Schweickart et al. (1994, Genomics vol. 23, 643-650) as applied to claims 39-43.

In response to the rejection, Applicant argues that neither Mansour nor Schwickart provides a motivation to make a lymphoid specific GPCR knockout mouse. Applicant further argues that the combined references do not teach every limitation of the invention because they do not teach a targeting construct capable of disrupting a lymphoid specific GPCR gene in a transgenic mouse which leads to a phenotype such as cellular infiltration. Applicant thus concludes the invention is not obvious.

The teaching of Mansour and Schweickart were discussed in detail in the office action mailed on 11/5/02. The reasons for the obviousness of the claimed invention were also discussed in the previous office action. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, contrary to Applicant's assertion, the combined references provide a motivation to make a lymphoid specific GPCR knockout mouse for the purpose of studying the role this gene plays in lymphocyte growth and regulation (see page 648, 1st col., last line, 2nd col., 4th paragraph, line 1-2), as suggested by Schweickart et al. It is well known to one of ordinary skill of art that a transgenic mouse with specific gene knockout can be

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used to study said gene function, as suggested by Mansour et al. (see page 349, 1st col., 1st paragraph). Therefore, the motivation to combine is clearly established by the combined teaching of Mansour and Schweickart.

As discussed in the previous office action, the recitation of “wherein the construct, when introduced into...phenotypes...” is intended use for the targeting construct, which do not carry patentable weight. In other words, such recitation is not a true limitation of the invention because it does not affect the targeting construct the structurally, and distinguish it from the construct taught by the art. Therefore, the invention is obvious in view of the combined teaching of Mansour et al. and Schwickart et al.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 70 and 71 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 70 and 71 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: selection of ES cells undergo homologous recombination.

The recitation of “pseudopregnant mouse gives birth” renders the claims indefinite because a pseudopregnant mouse cannot give birth.

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Claim Objections

Claim 71 objected to under 37 CFR 1.75 as being a substantial duplicate of claim 68.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Conclusion

Claims 63-69 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celine X Qian whose telephone number is 703-306-0283. The examiner can normally be reached on 9:00-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel Ph.D. can be reached on 703-305-1998. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3014.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Celine Qian, Ph.D.

Anne-Marie Falk
ANNE-MARIE FALK, PH.D.
PRIMARY EXAMINER